

Abstract

One aspect of the present invention relates to piperidine-piperazine compounds. A second aspect of the present invention relates to the use of the piperidine-piperazine compounds as ligands for various mammalian cellular receptors or transporters or both, including dopamine, serotonin or norepinephrine receptors or transporters, any combination of them, or all of them. The compounds of the present invention will find use in the treatment of numerous ailments, conditions and diseases which afflict mammals, including but not limited to addiction, anxiety, depression, sexual dysfunction, hypertension, migraine, Alzheimer's disease, obesity, emesis, psychosis, analgesia, schizophrenia, Parkinson's disease, restless leg syndrome, sleeping disorders, attention deficit hyperactivity disorder, irritable bowel syndrome, premature ejaculation, menstrual dysphoria syndrome, urinary incontinence, inflammatory pain, neuropathic pain, Lesche-Nyhan disease, Wilson's disease, and Tourette's syndrome. An additional aspect of the present invention relates to the synthesis of combinatorial libraries of the piperidine-piperazine compounds, and the screening of those libraries for biological activity, e.g., in assays based on dopamine receptors or transporters or both.